

Claims.

1. A pixel-based electronic display comprising a plurality of pixels, wherein said pixels respectively comprise dots of light emitting diode material.
2. The pixel-based electronic display of claim 1, wherein said pixels are arranged as segments of at least one seven-segment numeric display.
3. The pixel-based electronic display of claim 1, wherein said light-emitting diode dots are bonded to at least one underlying PCB.
4. The pixel-based electronic display of claim 4, wherein said light emitting diode dots are wire-bonded to said at least one underlying PCB.
5. The pixel-based electronic display of claim 2, wherein all of said pixels in any one of said segments are commonly wired.
6. The pixel-based electronic display of claim 1, wherein said light emitting diode dots are of a thickness not exceeding 200 microns.
7. The pixel based electronic display of claim 3, wherein said underlying PCB is of a thickness not exceeding 200 microns.
8. The pixel based electronic display of claim 3, wherein said underlying PCB is of a thickness not exceeding 150 microns.
9. The pixel-based electronic display of claim 1, wherein said pixels are configured to provide a brightness of substantially $4\text{Cd}/\text{cm}^2$ at a power of substantially 1.5mA.

10. The pixel-based electronic display of claim 6, wherein said pixels are configured to provide a brightness of substantially $4\text{Cd}/\text{cm}^2$ at a power of substantially 1.5mA.

11. The pixel-based electronic display of claim 1, incorporated into a smart card.

12. The pixel-based electronic display of claim 11, associated with a thin flexible battery within said smart card.

13. The pixel-based electronic display of claim 1, associated with at least one pressure sensor based input device.

14. A thin computing device comprising electronic processing functionality and a display screen, wherein said display screen is a pixel-based display screen comprising a plurality of pixels, wherein said pixels respectively comprise dots of light emitting diode material.

15. The thin computing device of claim 14, further comprising a thin flexible battery for powering at least said display screen.

16. The thin computing device of claim 14, wherein said display screen comprises a plurality of segments, each segment comprising a plurality of pixels wired together.

17. The thin computing device of claim 14, wherein said pixels are arranged as segments of at least one seven-segment numeric display.

18. The thin computing device of claim 14, wherein said light-emitting diode dots are bonded to at least one underlying PCB.

19. The thin computing device of claim 19, wherein said light emitting diode dots are wire-bonded to said at least one underlying PCB.

20. The thin computing device of claim 17, wherein all of said pixels in any one of said segments are commonly wired.

21. The thin computing device of claim 14, wherein said light emitting diode dots are of a thickness not exceeding 200 microns.

22. The thin computing device of claim 18, wherein said underlying PCB is of a thickness not exceeding 200 microns.

23. The thin computing device of claim 18, wherein said underlying PCB is of a thickness not exceeding 150 microns.

24. The thin computing device of claim 14, wherein said pixels are configured to provide a brightness of substantially $4\text{Cd}/\text{cm}^2$ at a power of substantially 1.5mA.

25. The thin computing device of claim 21, wherein said pixels are configured to provide a brightness of substantially $4\text{Cd}/\text{cm}^2$ at a power of substantially 1.5mA.

26. The thin computing device of claim 14, further comprising at least one touch panel associated with said computing functionality for allowing a user to interact with said device.

27. The thin computing device of claim 14, further comprising timing circuitry associated with said display screen, for energy management of said display screen.

28. A method of manufacturing a flexible low power display comprising:
providing pixel dots of LED material,
bonding said dots to a PCB having a backing material, and

removing said backing.

29. A method according to claim 28, wherein said providing pixel dots comprises using a masking procedure.

30. The method of claim 29, wherein said pixel dots comprise a layer not exceeding 200 microns of said LED material.

31. The method of claim 30, wherein said LED material is phosphide-doped Gallium arsenide.

32. The method of claim 28, wherein said PCB is of a thickness not exceeding 200 microns.

33. The method of claim 28, wherein said PCB is of a thickness not exceeding 150 microns.

34. The method of claim 28, wherein said backing layer is of a thickness of substantially 300 microns.

35. The method of claim 28, further comprising coating said display with a layer of epoxy resin.